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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,829

03/03/2004

Steven Peers

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EXAMINER

MIRZADEGAN, SAEED S

ART UNIT

PAPER NUMBER

2144

MAIL DATE

DELIVERY MODE

05/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/790,829	Applicant(s) PEERS, STEVEN	
	Examiner SAEED S. MIRZADEGAN	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 14-19, 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/3/2004, 5/25/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 03/03/2004 & 05/25/2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Specification

3. The disclosure is objected to because of the following informalities: page 8, line 25 recites " the interface 12", where it should read "the interface 112" .

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9 & 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 9 recites the limitation "the port engine" page 12, line 15 and "the starboard engine" page 12, line 17. There is insufficient antecedent basis for this limitation in the claim.

6. Insofar as best understood, the claims are rejected over prior art as follows. For the sake of applying the closest prior art below, the term (or limitation) "the port engine" & "the starboard engine" is being interpreted as meaning "an engine". If the applicant agrees with this interpretation they are invited to amend the claims to positively recite, "an engine" or if the applicant disagrees, the applicant should present an alternate interpretation with clear arguments.

7. Claims 13 recites the limitation "the outer port engine" page 13, line 11 and "the inner port engine" page 13, line 15 and "the inner starboard engine" page 13, line 17 and "the outer starboard engine" page 13, line 19. There is insufficient antecedent basis for this limitation in the claim.

8. Insofar as best understood, the claims are rejected over prior art as follows. For the sake of applying the closest prior art below, the term (or limitation) "the inner port engine" & "the inner starboard engine" & "the outer starboard engine" & "the outer port engine" is being interpreted as meaning "an engine". If the applicant agrees with this interpretation they are invited to amend the claims to positively recite, "an engine" or if the applicant disagrees, the applicant should present an alternate interpretation with clear arguments.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-7, 10, 11, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Herzog (Herzog), DE19921589.

10. Regarding claim 1, Herzog discloses: a plurality of input devices (see e.g. Abstract, line 1); a plurality of remote output devices (see e.g. Abstract, lines 1-2); a plurality of dedicated connections (see e.g. Abstract, line 2), wherein each one of the plurality of output devices is connected to one of the plurality of input devices by an associated one of the plurality of dedicated connections (see e.g. Abstract, line 3-5); and a digital data network interconnecting the plurality of input devices and the plurality of remote output devices (see e.g. Abstract, lines 2-3), wherein each output device is operable to use a network address dependent upon a value received via its dedicated connection (see e.g. Abstract, lines 5-8).

11. Regarding claim 2, Herzog discloses: each output device permanently stores a plurality of network addresses and is operable to select one of a plurality of permanently stored network addresses in dependence upon a value received via its dedicated connection (see e.g. Abstract, lines 8-10).

Art Unit: 2144

12. Regarding claim 3, Herzog discloses: each output device is operable to select one of the plurality of permanently stored network addresses in dependence upon an identity between a value received via its dedicated connection and one of a plurality of values (see e.g. Abstract, lines 8-10).

13. Regarding claim 4, Herzog discloses: each output device receives the plurality of values as a value for each of the plurality of input devices via the digital data network (see e.g. Abstract, lines 5-8).

14. Regarding claim 5, Herzog discloses: the values for each of the plurality of input devices are received in a single data packet (see e.g. Fig. 1, "M1(k1)" & "M1'(k1)").

15. Regarding claim 6, Herzog discloses: each output device is arranged to compare a value received via its dedicated connection with at least first and second values received via the digital data network and to use a first address if the value received via its dedicated connection is the same as the first value received via the digital data network and to use a second address if the value received via its dedicated connection is the same as the second value received via the digital data network (see e.g. col.3, lines 15-29).

16. Regarding claim 7, Herzog discloses: the first and second values are received in a data packet (see e.g. Fig. 1, "M1(k1)" & "M1'(k1)") addressed to the plurality of output

Art Unit: 2144

devices (having multiple output devices is a design choice and thus is inherent to any control system).

17. Regarding claim 10, all the limitations of Claim 10 have been addressed above in Claim 6 for first and second values as opposed to first, second, third and fourth values. The same rationale used to address Claim 6, applies equally as well to Claim 10. Having multiple input and output devices is a design choice and thus is inherent to any control system.

18. Regarding claim 11, all the limitations of Claim 11 have been addressed above in Claim 7 for first and second values as opposed to first, second, third and fourth values. The same rationale used to address Claim 7, applies equally as well to Claim 11. Having multiple input and output devices is a design choice and thus is inherent to any control system.

19. Regarding claim 20, Herzog discloses: a plurality of input devices (see e.g. Abstract, line 1); a plurality of remote output devices (see e.g. Abstract, lines 1-2); a plurality of dedicated connections (see e.g. Abstract, line 2), wherein each one of the plurality of output devices is connected to one of the plurality of input devices by an associated one of the plurality of dedicated connections (see e.g. Abstract, line 3-5); and a digital data network interconnecting the plurality of input devices and the plurality of remote output devices (see e.g. Abstract, lines 2-3), wherein each output device is

operable to detect a digital network configuration error by comparing a value of a parameter received via its dedicated connection with the value of the same parameter received via the digital data network (see e.g. Abstract, lines 5-8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. Claims 8, 9, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog in view of Walker et al. (Walker), US PG. Pub. No. 2003/0205042.

21. Regarding Claim 8, Herzog discloses the invention substantially as claimed.

However, Herzog does not explicitly teach: a port aero-engine and a starboard aero-

Art Unit: 2144

engine and a first thrust control for a port engine and a second thrust control for a starboard aero-engine.

22. In the same field of endeavor, Walker teaches, (See e.g. page 1, ¶0002, a throttle control for a first aircraft engine, having multiple engines (starboard & port) and multiple throttles (starboard throttle & port throttle) is a design choice and thus inherent).

23. It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Walker's teachings as discussed above with the teachings of Herzog, for the purpose of (see Walker, ¶0006). Herzog provides motivation to do so, by providing a highly reliable data transmission between a master and a slave even in the event of a fault in one of the data transmission paths between the master and the slave (see Herzog, Col. 2, lines 5-13).

24. Regarding Claim 9, Herzog discloses the invention substantially as claimed. However, Herzog does not explicitly teach: a first dedicated connection for providing the thrust control setting from the first thrust control to the port engine and a second dedicated connection for providing the thrust control setting from the second thrust control to the starboard engine.

Art Unit: 2144

25. In the same field of endeavor, Walker teaches, (See e.g. page 1, ¶0002, a throttle control for a first aircraft engine, having multiple engines and multiple throttles is a design choice and thus inherent).

26. The same motivation utilized in the combination of claim 8, equally applies as well to claim 9.

27. Regarding claim 12, all the limitations of Claim 12 have been addressed above in Claim 8 for port and starboard aero-engines as opposed to outer port and Inner port and outer starboard and inner starboard aero-engines. The same rational used to address Claim 8, applies equally as well to Claim 12. Having multiple input and output devices is a design choice and thus is inherent to any control system.

28. Regarding claim 13, all the limitations of Claim 13 have been addressed above in Claim 9 for first thrust control to port engine and second thrust control to starboard engine as opposed to first thrust control to the outer port engine and second thrust control to the Inner port engine and third thrust control to the inner starboard engine and fourth thrust control to the outer starboard engine. The same rational used to address Claim 9, applies equally as well to Claim 13. Having multiple input and output devices is a design choice and thus is inherent to any control system i.e. thrusters and engines.

Response to Arguments

29. Applicant's election of Claims 1-13 and 20 with traverse in the reply filed on 03/03/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP §818.03(a)). The requirement is still deemed proper and is therefore made FINAL.

30. Claims 14-19 and 21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected subject matter, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 03/03/2008.

31. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) see MPEP § 821.01.

32. In the reply filed on 03/03/2008, Applicant provided general allegation of improper restriction requirement, traversing the restriction. In particular, Applicant alleged that: "...the subject matter of all claims 1-21 is sufficiently related that a thorough search for the subject matter of any one Group of claims would encompass a search for the subject matter of the remaining claims". However Applicant did not distinctly and specifically point out why it is believed that the two groups of claims are related. The examiner provided specific reasons as to why it is believed that the two

Art Unit: 2144

groups of claims are distinct. The applicant did not argue the specific reasons provided by the Examiner in the restriction requirement action mailed 02/06/2008. Thus the Applicant's remarks are not persuasive and the restriction requirement is proper.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAEED S. MIRZADEGAN whose telephone number is (571)270-3044. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. S. M./
Examiner, Art Unit 2144

/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2144